REMARKS

Claims 1-21 are pending in the present application. By this Response, claim 1 is amended to clarify that a picker robot automatically moves at a first specified speed if the access means is closed and automatically moves at a second specified speed that is a non-zero speed and is slower than the first speed if the access means is open. Support for the amendment can be found at least on page 9, lines 15-26 of the present specification. Claims 7-21 have been withdrawn. Reconsideration of the claims is respectfully requested in view of the claim amendment and the remarks set forth below.

I. Objection to Abstract

The abstract of the disclosure is objected to because the abstract is longer than 150 words. By this Response, the abstract is amended, as requested by Examiner, to consist of 150 words or less as required by section 608.01(b) of the MPEP.

II. 35 U.S.C. § 103, Alleged Obviousness of Claims 1-6

The Office Action rejects claims 1-6 under 35 U.S.C. § 103(a) as being allegedly unpatentable over the allegedly admitted prior art in view of Faiman et al. (U.S. Publication No. 20020009512). This rejection is respectfully traversed.

With regard to claims 1-6, the Office Action states:

> Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Faiman et al. The admitted prior art teaches a media library comprising:
>
> an enclosure for housing a bi-directional array of media cartridges;
>
> a plurality of picker robots responsive to a control device for retrieving and placing the media cartridge from or to the storage locations;
>
> a plurality of access means to said enclosure.
>
> The admitted prior art does not teach a safety interlock for the door to the enclosure.
>
> Faiman et al. US 2002/0009512 teaches a device with a safety interlock comprising:
>
> a door (32) covering the moving part of the press machine (19);
>
> a sensor on said door for detecting if the door is opened or closed;

a control device that operates the device the device in the following modes:

a first mode where the door is closed and the device moves at a first specified speed;

a second mode where the door is open and the device moves at a second specified speed that is slower than the first specified speed;

wherein the speed reduction is set via a command to a controller or through changes in power to a variable frequency drive motor;

wherein the door sensor operates only in said second mode if said door is open.

It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the admitted prior art with a safety interlock as taught by Faiman et al. in order to keep the operator from being hurt by the device while working in the enclosure.

Office Action dated January 21, 2004, pages 2-3.

Claim 1 reads as follows:

1. A safety system for a media library comprising a plurality of media storage cells and at least one media picker robot that moves along the media storage cells, wherein the library is contained within an enclosure having at least one access means, the safety system comprising:

an access sensor that detects if the access means in the enclosure is open; and

a control component that operates the robot in the media library in one of the following modes:

if the access means is closed, a normal mode, wherein the picker robot automatically moves at first specified speed; and

if the access means is open, a safe mode, wherein the picker robot automatically moves at a second specified speed that is a non-zero speed and is slower than the first speed of the normal mode. (emphasis added)

The allegedly admitted prior art referenced by the Office Action is directed to a media storage library containing robots for manipulating media cartridges in a media library. The allegedly admitted prior art, however, does not teach or suggest any type of mechanism for detecting an open or closed status of an access means and automatically controlling the speed of the robots based on the status of the access means. The Office Action admits that the disclosed prior art does not teach such a feature. However, the Office Action alleges this feature is taught by Faiman. Applicants respectfully disagree.

Faiman is directed to a system for automating a powder compacting press. In Faiman, a variable frequency drive controls the rotation of a cam shaft. The variable frequency drive communicates with a safety cover interlock, a control panel and a rotary drive. From the control panel, an operator can select one of two modes for the press to operate, run mode and set up mode. While in the run mode, the variable frequency drive operates to increase or decrease the rotational speed of the rotary drive within an operational range of speeds, provided that the interlock indicates that the safety cover is closed. If, however, the safety cover is open while the machine is in run mode, the rotary drive will be inactivated (page 2, paragraph [0016] and page 3, paragraph [0021]). While in set up mode, a jog switch will allow the operator to "jog", or incrementally advance, the rotary drive while the safety cover is up. The jog switch operates in such a manner to cause rotation of the rotary drive whether the interlock indicates the cover is open or closed only while the jog switch is manually manipulated (page 3, paragraph [0022]). In other words, the rotation of the rotary drive during a jog is not self perpetuating and thus requires an operator to manually maintain switch activation. (Abstract)

Thus, the operator must manually switch the machine into a set up mode, and then manually initiate a jog by activating a jog switch. While Faiman may teach controlling the speed of a rotary drive, there is nothing in Faiman that teaches that the rotary drive automatically moves at different non-zero speeds dependent on the safety cover being open or closed. To the contrary, the rotary drive speed in Faiman is dependent on 1) the mode of operation and 2) if the mode of operation is set up, the manual manipulation of the jog switch. Faiman describes the operation of the run and set up modes in detail in paragraphs [0021] and [0022], which reads as follows:

> In one preferred embodiment of the present invention, the mode control 57 is used to choose either a set up mode or a run mode. The set up mode may also be referred to as a JOG mode. In the run mode, the variable frequency drive controller 40 runs the rotary drive 46 at the speed set by the parameter control buttons 50. However, the variable frequency drive controller 40 only allows the rotary drive to run if the safety cover interlock 44 indicates that the safety cover is closed. Other interlocks must also indicate that other features are in place. The drive controller 40 begins running the rotary drive 46 when the operator presses the run control or button 52. The drive controller 40 stops the rotary drive 46 if the operator

presses the stop button 54 or opens the safety cover thereby tripping the safety cover interlock 44. The direction control is preferably inoperable such that reverse operation is not possible in the run mode. The run mode is used for producing parts using the press and allows the press to be run at a variety of speeds. The speeds at which the drive controller will run the rotary drive 46 in the run mode may be referred to as a "first range of speeds". The range of speeds partially depends on the depth of fill in the cavity. In one embodiment, for example, the range of speeds for 0.300 inch fill is 28-150 operation cycles or strokes per minute, while the range is 28-120 cycles or strokes per minute for 0.600 inch fill. It should be noted that the cycles or strokes per minute referred to in this section of the application refer to cycles or strokes of the press and not to rotations of the rotary drive. For example, a belt between the cam shaft and the drive may change the relative speeds so that the motor runs at a different speed than the cam shaft. Other ranges of speeds may be provided depending on particular rotary drive and the operating conditions. For example, with an alternative assembly (belts and pulleys), the minimum cycle speed is 18 cycles per minute. However, in each case, the ranges of speeds preferably have a lower limit below which the rotary drive is not run in the run mode so as to avoid overheating of the rotary drive.

In the set up or jog mode, the variable frequency drive controller 40 operates differently. The set up or jog mode is chosen by the operator using the mode control 57. On the display panel 55, this requires turning the key switch. In the setup mode, the variable frequency drive controller rotates the rotary drive 46 at a speed lower than the first range of speeds previously discussed when the operator depresses the run control button 52. However, rotation of the rotary drive 46 continues only when the run control button 52 is depressed. If the operator releases the button, the rotation stops. The direction control 58 is operable to change the direction of rotation of the rotary drive in the set up mode. Indicator lights 60 indicate the direction of rotation. Preferably, if the drive is rotating one direction and the operator presses the direction control 58, the drive slows to a stop and then begins turning in the opposite direction, though it should be noted that this reverse operation is available only at jog speed. Also, the variable frequency drive controller 40 allows the safety cover to be open while in setup mode. That is, the safety cover interlock 44 can indicate that the cover is closed or not closed and the drive controller will allow operation of the press at the slow jog speed. The same preferably applies to a front cover. The front cover may also be open while in setup mode. In one preferred embodiment, the jog speed is set at 5 cycles per minute. The operator may accurately control the movement of the rotary drive 46 by tapping or bumping the run control 52. This is referred to as "jogging" the press. (emphasis added)

Thus, in Faiman, if an interlock indicates that a safety cover is open, the rotary drive only rotates when an operator places the machine in set up mode and manually depresses a jog switch. The presently claimed invention, on the other hand, recites that the picker robot moves at a non-zero speed when the access means is open or closed and the speed of the picker robot is determined based upon whether the access means is open or closed, not whether the machine is manually put into a particular mode and manually jogged by an operator as in Faiman. A control component in the present invention automatically operates the picker robot in a particular mode dependent on the status of the access means. Thus, Faiman does not teach automatically moving a picker robot at a specified speed dependent on whether the access means is open or closed as recited in claim 1 of the present invention.

Furthermore, claim 1 of the present invention recites a picker robot in a media library. Faiman is not directed to a media library or to any type of system that uses picker robots. This is because Faiman is non-analogous art to the presently claimed invention. Faiman has nothing to do with a media storage library and thus, one of ordinary skill in the art would not have found it obvious to create a media library in which picker robots move at different speeds dependent on whether the access means is open or closed. Rather, without having the benefit of Applicants' claimed invention, one of ordinary skill in the art would not have even looked to Faiman to solve the problems solved by the present invention because Faiman is directed to a powder press machine while the present invention is directed to a media storage library.

To the contrary, as stated in paragraph [0005], Faiman is concerned with solving the problem of hand cranks in previous powder packing equipment. Faiman has nothing to do with media libraries or picker robots in media libraries. One of ordinary skill in the art would not have even found Faiman, absent hindsight knowledge, when attempting to improve upon a media library, let alone tried to combine Faiman with a media library. Thus, Faiman is non-analogous art to the presently claimed invention as recited in claim 1.

In order to rely on a reference as a basis for rejection, the reference must be either in the applicants' field of endeavor or, if not, then reasonably pertinent to the particular problem with which the inventor was concerned. *In re Oetiker*, 977 F.2d 1443, 24

U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992); *In re Deminski*, 796 F.2d 436, 442, 230 U.S.P.Q. 313, 315 (Fed. Cir. 1986). The teachings of Faiman are neither in the Applicants' field of endeavor or reasonably pertinent to the problem in which the present invention is concerned. That is, the teachings of Faiman are not directed to the field of media storage libraries. Moreover, Faiman is not concerned with allowing maintenance to be performed on a media library while simultaneously maintaining operation of the media library as in the present invention. Thus, Faiman cannot be relied upon as a basis for rejecting claim 1 of the present invention because Faiman is non-analogous to the present invention.

There is no teaching or suggestion in the allegedly admitted prior art regarding a need for a safety mechanism in a media library, such as that recited in the claims. To the contrary, the only recognized need for such a feature is from Applicants recognition of the problem. Moreover, Faiman only recognizes a need to replace hand cranks in powder packing equipment. Thus, the "motivation" of safety offered by the Office Action is based on hindsight reconstruction of Applicants' claimed invention.

In view of the above, Applicants respectfully submit that neither the allegedly admitted prior art nor Faiman, either alone or in combination, teaches or suggests all of the features of independent claim 1. At least by virtue of their dependency on claim 1, Faiman does not teach or suggest all of the features of dependent claims 2-6. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-6 under 35 U.S.C. § 103(a).

Furthermore, in addition to being dependent on claim 1, claims 2 and 5 are also allowable by virtue of the specific features recited therein. For example, with regard to claim 2, neither the allegedly admitted prior art nor Faiman, either alone or in combination, teach or suggest that a control component operates a robot in safe mode only if the access means is unlocked. The Office Action admits that the allegedly admitted prior art does not teach this feature. The Office Action, however, alleges that this feature is taught by Faiman. Applicants respectfully submit that Faiman does not teach this feature, and in fact, actually teaches away from the features recited in claim 2 of the present invention. That is, Faiman teaches that the powder compacting press can operate in a jog (safe) mode while the cover is locked or unlocked as stated in paragraph [0023] of Faiman, which reads as follows:

> The press also preferably can be run at jog speed while in the run mode. The jog button 56 is used to switch the press from the normal operating speed to the jog speed while in the run mode. The press may then be run at jog speed by pressing the run button. This operation differs from the setup mode in that the safety cover cannot be opened. In order to open the safety cover while operating the press, the control must be placed in the setup mode using the switch 57. Placing the press in the setup mode forces it to run at jog speed as well.

Thus, the press can run at a jog speed while in the run mode. In Faiman, the interlock must indicate that the cover is closed for the press to run in run mode. Thus, even while the access means is locked in Faiman, the press can still run at a jog speed. Therefore, neither the allegedly admitted prior art nor Faiman, either alone or in combination, teach or suggest that a control component operates a robot in safe mode only if the access means is unlocked.

With regard to claim 5, neither the allegedly admitted prior art nor Faiman, either alone or in combination, teach or suggest a plurality of picker robots that are responsive to a control component that automatically operates the robots in a normal mode or a safe mode dependent upon whether the access means is open or closed. The Office Action admits that the allegedly admitted prior art does not teach anything having to do with safety interlocks which provide means for a safe mode. Thus, the allegedly admitted prior art does not teach or suggest a plurality of picker robots that are responsive to a control component that automatically operates the robots in a normal mode or a safe mode dependent upon whether the access means is open or closed. The Office Action alleges that this feature is taught by Faiman. Applicants direct the Examiner to the arguments set forth above with respect to Faiman. Faiman does not teach a control component that operates in such a manner that the speed of a picker robot is automatically adjusted according to the status of the access means. Thus, neither the prior art nor Faiman, either alone or in combination, teach or suggest a plurality of picker robots that are responsive to a control component that automatically operates the robots in a normal mode or a safe mode dependent upon whether the access means is open or closed.

III. Conclusion

It is respectfully urged that the subject application is patentable over the allegedly admitted prior art and Faiman and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: May 14, 2004

Respectfully submitted,

Betty Formby

Betty G. Formby
Reg. No. 36,536
Yee & Associates, P.C.
P.O. Box 802333
Dallas, TX 75380
(972) 367-2001
Agent for Applicants